```
<!--StartFragment-->RESULT 6
AGLA_RHIME
ID
   AGLA RHIME
                            Reviewed:
                                            551 AA.
AC.
   09Z3R8:
    30-MAY-2000, integrated into UniProtKB/Swiss-Prot.
DT
DT 02-NOV-2001, sequence version 2.
DT 24-JUL-2007, entry version 44.
DE Probable alpha-glucosidase (EC 3.2.1.20).
GN Name=ag1A; OrderedLocusNames=R00698; ORFNames=SMc03064;
os
   Rhizobium meliloti (Sinorhizobium meliloti).
OC.
    Bacteria; Proteobacteria; Alphaproteobacteria; Rhizobiales;
OC.
    Rhizobiaceae; Sinorhizobium/Ensifer group; Sinorhizobium.
OX
    NCBI_TaxID=382;
RN
     [1]
RP
    NUCLEOTIDE SEQUENCE (GENOMIC DNA).
RX
    MEDLINE=99328961; PubMed=10400573;
RA
    Willis L.B., Walker G.C.;
RT
    "A novel Sinorhizobium meliloti operon encodes an alpha-glucosidase
RT
    and a periplasmic-binding-protein-dependent transport system for
RT
    alpha-glucosides.";
RL
    J. Bacteriol. 181:4176-4184(1999).
RN
    [2]
RP
    NUCLEOTIDE SEQUENCE [LARGE SCALE GENOMIC DNA].
RC
    STRAIN=1021;
RX
    MEDLINE=21396507; PubMed=11481430; DOI=10.1073/pnas.161294398;
RA
    Capela D., Barloy-Hubler F., Gouzy J., Bothe G., Ampe F., Batut J.,
RA
    Boistard P., Becker A., Boutry M., Cadieu E., Dreano S., Gloux S.,
RA
    Godrie T., Goffeau A., Kahn D., Kiss E., Lelaure V., Masuy D.,
RA
    Pohl T., Portetelle D., Puehler A., Purnelle B., Ramsperger U.,
RA
   Renard C., Thebault P., Vandenbol M., Weidner S., Galibert F.;
RT
    "Analysis of the chromosome sequence of the legume symbiont
RT
   Sinorhizobium meliloti strain 1021.";
RL
    Proc. Natl. Acad. Sci. U.S.A. 98:9877-9882(2001).
CC
    -!- CATALYTIC ACTIVITY: Hydrolysis of terminal, non-reducing 1,4-
CC
         linked alpha-D-glucose residues with release of alpha-D-glucose.
CC
    -!- SIMILARITY: Belongs to the glycosyl hydrolase 13 family.
     Copyrighted by the UniProt Consortium, see http://www.uniprot.org/terms
CC
    Distributed under the Creative Commons Attribution-NoDerivs License
CC
DR
    EMBL; AF045609; AAD12047.1; -; Genomic_DNA.
DR
    EMBL; AL591784; CAC45270.1; -; Genomic DNA.
DR
    HSSP: P21332: 1UOK.
DR
    GenomeReviews; AL591688_GR; R00698.
    KEGG; sme:SMc03064; -.
    BioCyc; SMEL266834:SMC03064-MONOMER; -.
DR
    GO; GO:0004558; F:alpha-glucosidase activity; IEA:EC.
    InterPro; IPR006047; Glyco hydro 13 cat.
DR
DR
    InterPro; IPR006589; Glyco_hydro_13_sub_cat.
     InterPro; IPR013781; Glyco_hydro_cat.
DR
DR
    Gene3D; G3DSA:3.20.20.80; Glyco hydro cat; 1.
DR
    Pfam; PF00128; Alpha-amylase; 1.
DR
    SMART; SM00642; Aamy; 1.
PE
    3: Inferred from homology;
KW
    Complete proteome; Glycosidase; Hydrolase.
FT
    CHAIN
                1
                       551
                                Probable alpha-glucosidase.
FT
                                 /FTId=PRO_0000054312.
FT
   ACT SITE 212 212
                               Nucleophile (By similarity).
FT ACT_SITE
               272 272
                                Proton donor (By similarity).
FT
   ACT SITE 345
                      345
                                By similarity.
    CONFLICT
                13
FT
                       13
                                P -> A (in Ref. 1).
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FT
   CONFLICT
              20
                    21
                            GA -> RP (in Ref. 1).
             402
                   415
                            YGTOFWPDFKGRDG -> MASSSGPTSSAGR (in Ref.
   CONFLICT
FT
FT
   CONFLICT
             445
                   460
                            PRAVAVOEGDPASVLH -> RGRCRAGGRPGLGAA (in
FT
                            Ref. 1).
   SEQUENCE 551 AA; 62576 MW; BB7BD3E17C935509 CRC64;
SO
 Query Match
                     54.5%; Score 1595.5; DB 1; Length 551;
 Best Local Similarity 57.3%; Pred. No. 9.7e-113;
 Matches 294; Conservative 74; Mismatches 130; Indels 15; Gaps
                                                              6:
         3 EWWRGAVTYOVYPRSFODSNGDGIGDLPGITARLEYLADLGVDAVWLSPFFKSPMKDMGY 62
           Db
        16 DWWRGAVIYQIYPRSFQDTNGDGIGDLQGITARLPHIAGLGADAIWISPFFTSPMRDFGY 75
        63 DVSDYCDVDPVFGTLADFDALLARAHELGLKVIIDQVLSHSSDLHPAFVTSRSDRVNPKA 122
Qy
           Db
        76 DVSNYVDVDPIFGTLEDFDALIAEAHRLGLRVMIDLVLSHTSDRHPWFVESRSSRSNAKA 135
Qv
        123 DWYVWADPKPDGSPPNNWLSVFGGSAWAWDARRKQYYLHNFLTSQPDLNYHNPKVQDWAL 182
           nh
        136 DWYVWADSKPDGTPPNNWLSIFGGSAWQWDPTRLQYYLHNFLTSQPDLNLHNPQVQEALL 195
        183 DNMRFWLDRGVDGFRFDTVNYFFHDPLLRSNPA---DHRNKPEADG-NPYGMQYHLHDKN 238
              196 AVERFWLERGVDGFRLDTINFYFHDRELRDNPALVPERRNASTAPAVNPYNYOEHIYDKN 255
Db
        239 OPENLIWMERIRVLLDOYGA-ASVGEMGESHHAIRMMGDYTAPG-RLHOCYSFEFMGYE- 295
Qу
           Db
        256 RPENLEFLKRFRAVMDEFPAIAAVGEVGDSQRGLEIAGEYTSGGDKVHMCYAFEFLAPDR 315
        296 YTANLFRORIESFFKGAPKGWPMWAFSNHDVVRHVSRWAKHGLTPEAVAKOTGALLLSLE 355
Qv
                :: 1:11:11 | 1111111111111111
                                               :1 11 :11:11
            1
Dh
        316 LTPORVAEVLRDFHRAAPEGWACWAFSNHDVVRHVSRWADGVTDHDAHAKLLASLLMSLR 375
Qv
        356 GSICLWEGEELGQTDTELALDELTDPQGIVFWPEPIGRDNTRTPMVWDASPHGGFSTVTP 415
           1::1:::1111 : : 11 ::1 11 11 111: 111 11111:: 1 1111: 11
        376 GTVCIYQGEELALAEAELDYEDLQDPYGIQFWPDFKGRDGCRTPMVWESLPDGGFSSATP 435
        416 WLPVKPEOAARHVAGOTGDAASVLESYRAMLAFRRAEPALRTGRTRFLDLAEPVLGFVRG 475
Qу
                   Db
        436 WLPISOSHIPRAVAVQEGDPASVLHHYRRFLAFRKANPALAKGEIEFVETRGSLLGFLRS 495
        476 EGEGAILCLENLS-----PVARGVAVEGVG 500
Qу
            1 : 1111:1
                            1: 1 :11 1
        496 HGNEKVFCLFNMSDEAATKELPMKRLEPLEGHG 528
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<sup>&</sup>lt;!--EndFragment-->